

WHAT IS CLAIMED IS:

1. A vehicle operation control method for controlling an actual steering angle of driven wheels based on a steering angle by a steering wheel and vehicle velocity, comprising:

5 a first step of obtaining a steering angle velocity based on the steering angle by the steering wheel;
a second step of obtaining the actual steering angle of the driven wheels;

10 a third step of controlling a variable gain based on the vehicle velocity, the steering angle, the steering angle velocity and the actual steering angle;

a fourth step of multiplying the variable gain with the steering angle; and

15 a fifth step of controlling the actual steering angle of the driven wheels based on a result of multiplication in the fourth step.

2. The vehicle operation control method according to claim 1 wherein the third step comprises:

20 a 3a step of judging which the turning direction of the steering wheel is in an additional turning direction which increases the steering angle or in a turning-back direction which decreases the steering angle, based on the steering angle and the steering angle velocity; and

25 a 3b step of if the turning direction of the steering wheel judged in the 3a step is the additional turning direction, selecting an additional turning time variable gain as the variable gain and if the turning direction is the turning-back direction, selecting the turning-back time variable gain as the variable gain.

30 3. The vehicle operation control method according to claim 2 wherein as for the additional turning time variable gain of the third step, the variable gain is determined based on the vehicle velocity and the steering angle velocity and as for the turning-back time variable gain of the third step, the variable

gain is determined based on the steering angle and the actual steering angle.

4. A vehicle operation control apparatus for controlling an actual steering angle of driven wheels based on a steering angle
5 by a steering wheel and vehicle velocity, comprising:

a steering angle velocity obtaining means for obtaining a steering angle velocity based on the steering angle by the steering wheel;

- 10 an actual steering angle obtaining means for obtaining the actual steering angle of the driven wheels;

a variable gain control means for controlling a variable gain based on the vehicle velocity, the steering angle, the steering angle velocity and the actual steering angle;

- 15 a multiplying means for multiplying the variable gain with the steering angle; and

an actual steering angle control means for controlling the actual steering angle of the driven wheels based on a result of multiplication by the multiplying means.

5. The vehicle operation control apparatus according to claim
20 4 wherein the variable gain control means comprises:

- a turning direction judgment means for judging which the turning direction of the steering wheel is in an additional turning direction which increases the steering angle or in a turning-back direction which decreases the steering angle, based
25 on the steering angle and the steering angle velocity; and

- a variable gain selection control means for, if the turning direction of the steering wheel judged by the turning direction judgment means is the additional turning direction, selecting an additional turning time variable gain as the variable gain
30 and if the turning direction is the turning-back direction, selecting the turning-back time variable gain as the variable gain.

6. The vehicle operation control apparatus according to claim 5 wherein as for the additional turning time variable gain by

the variable gain control means, that variable gain is determined based on the vehicle velocity and the steering angle velocity and as for the turning-back time variable gain by the variable gain control means, that variable gain is determined based on
5 the steering angle and the actual steering angle.